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An

Essay  
on

Cholera Morbus

by

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of

Pennsylvania

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1842

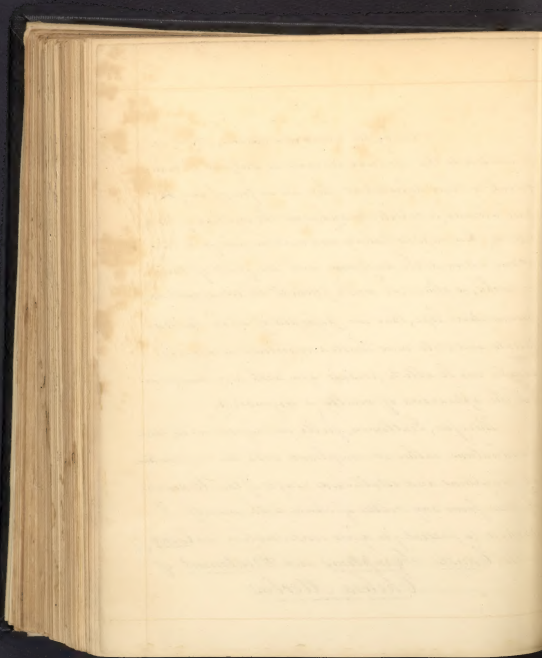
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Among the numerous diseases, which are presented to the medical students, as subjects of inaugural or other dissertations, there are so few, if any, but have already so repeatedly undergone the scrutiny of those, who by their superior talents and exertions have from time to time adorned the profession with the fruits of their researches, as almost, at once, to preclude the extravagant and presumptive hope, that one possessed of such limited talents and still more limited experience as myself, should ever be able to present you with anything, wearing the appearance of novelty or originality.

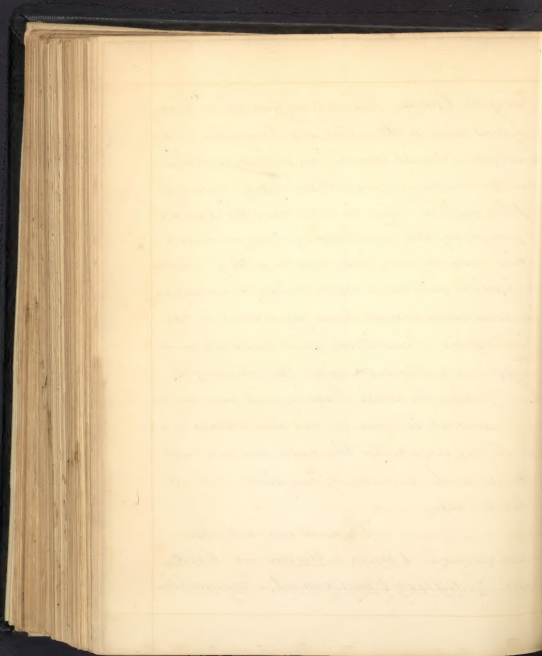
Therefore, Gentlemen, fully impressed with these considerations, rather in compliance with the constitution of requisitions and established usages of this University than from any matter of choice with myself I propose to present for your consideration an Essay on the Causes Symptoms and Treatment of Cholera Morbus.



First of the Causes. These, judging from the authority of different writers on the subject, and having been myself the subject of several attacks of the disease, as well as from the limited experience I have had of treating it in others, confirm us in the belief that the Causes are very imperfectly understood, if I may be allowed to judge from my own person and from the first attack I had, which could not be traced to any cause whatever.

The second attack occurred during my residence in the Philadelphia Almshouse, which could not be attributed to any other cause unless the following; the evening preceding the attack I was engaged in endeavouring to resuscitate two men, who had been destroyed in a well by foul air, whether this could have had any influence in the production of <sup>the</sup> complaint I am not prepared to say.

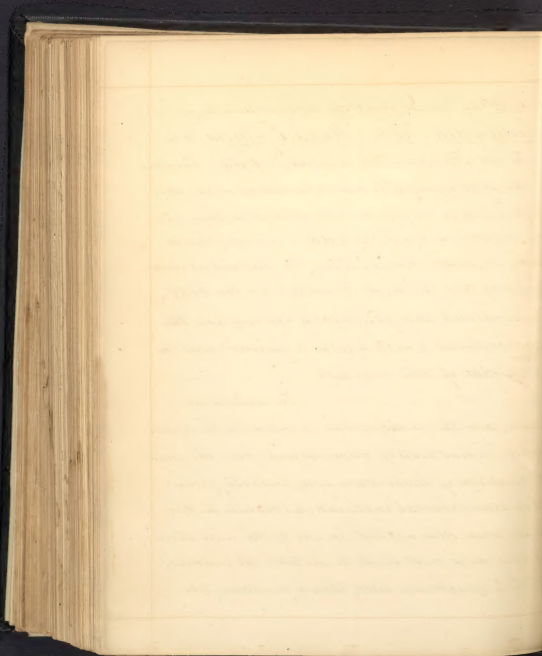
The general and most certain causes, however, of Cholera Morbus are Cold, Heat, Sedentary Employment, Irregularities



in Eating and Drinking, more particularly, of  
Indigestible Foods, Marsh Effluvia &c. &c.

The first of these, which is to be noticed, is Cold. The action of this agent appears to be more dependent, upon the state of the system at the period of its application, than upon the manner, in which the Cold is applied; though lying on damp ground, getting the feet wet, or drinking any cold fluid, as ice water, when the body, is over-heated and fatigued by exercise, are the circumstances, which appear to favour most the production of this complaint.

The autumnal season, from the predisposition induced in the system by the previous heats of summer, and from the great or variations of temperature and, probably, from some atmospherical influence, appears to be the season, when cold applied in any of the ways above mentioned, is most liable to disturb the functions of the Stomach and Liver, thereby rendering the



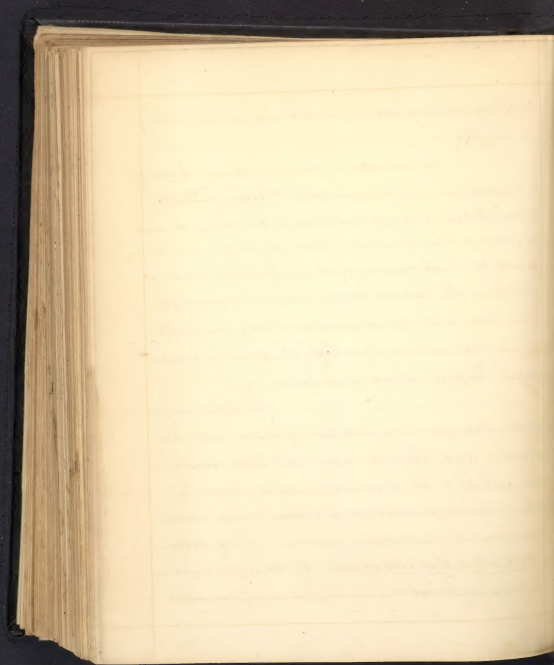


secretions, more profuse in quantity and, perhaps, altered in quality.

The next cause, we are to consider, is Heat; this agent is most likely to excite Cholera Morbus when applied in quick succession after cold, as by removing from a cold into a hot climate, in which case the powers of digestion are very much impaired, and in a short time the hepatic system becomes deranged, we then have an increased secretion of bile, marked by certain peculiarities of quality, the nature of which, as yet, I believe, remains undecided.

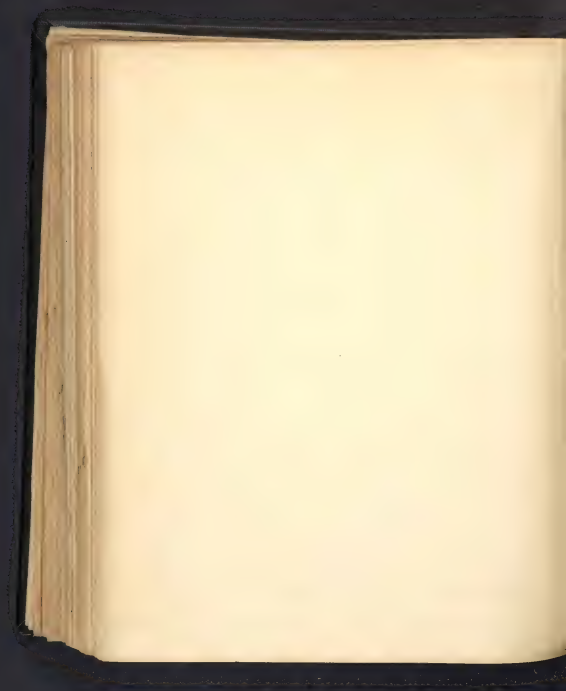
The calorific rays of the sun exercise a peculiar influence upon the stomach and liver, by which this latter organ is stimulated to an augmented action producing these profuse evacuations of bilious matter, which constitute the most striking feature in this affection.

Sedentary Employments. Of these perhaps it will be sufficient to remark, that anything, which



now to debilitate and weaken the stomach and consequently the system, will exercise an important influence in increasing the elevation of these vessels, which produce the diarrhoea. It is a fact, familiar to every one, that the system, when weakened from any cause, is readily affected by agents, which in a state of healthy vigour would not resist. Hence, we find when the healthy action has been substituted, the system is rendered more susceptible to any morbid impression, which may be exerted sufficiently near, to produce it.

It has  
already been said that irregularities in Eating  
and Drinking are, verruca Cancer  
Herpes. It may be that in a direct  
manner, independent of any other cause, either  
can be excited in the morbid state of matter inter-  
suse to the stomach, & even the individual  
either in actual habits, during the stomach



intestines and liver to an inordinate action,  
produced a disease in the former, and a morbid  
secretion from the latter organ. In these cases,  
however, in which irregularities of diet have pro-  
duced the complaint, it need not follow, or necessarily  
follow, that some of the preceding causes of debility  
affecting the system, have created a morbid action in  
the circulation of the blood.

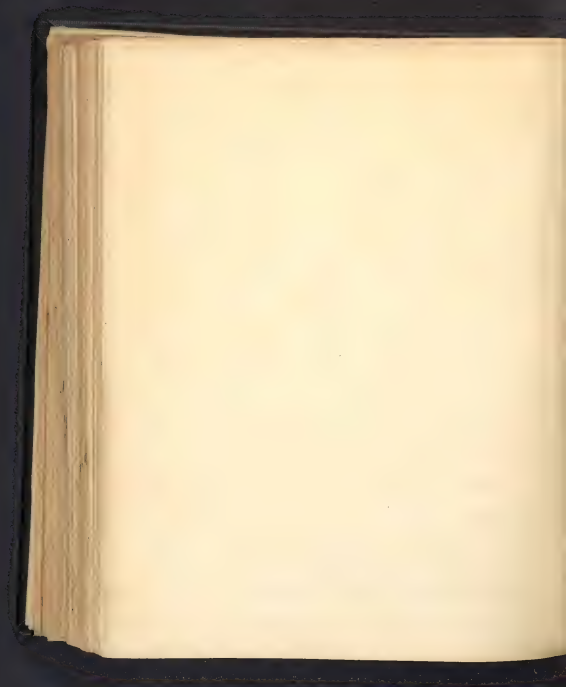
In considering  
these cases, the first notion which occurs in the mind  
is, that, we must, at least, be guided by the circum-  
stances, under which it is taken; or more, which  
will be found in various other cases.  
The stomach and system, either at another time  
or at the same time, are diseased, and morbid se-  
cretions, or morbid actions, are the result, or the  
consequence, of a disease in the system.

Third Cause. The human body  
is considered the most perfect of all.



didymus, grow under considerations, which has been  
most happily compared, by the distinguished Profes-  
sor of the Practice of Physic in this University, to  
bilious fever, turned in upon the bowels. The  
proof of which, he has stated "that they make their  
appearance at the same season of the year and are  
produced by the same causes and are cured by  
nearly the same remedies". The nature of this sudu-  
ginal, or its, peculiar action on the system, is not,  
I believe, as yet clearly ascertained, and I wish  
you would not presume to give any opi-  
nion, preferring rather to leave it to those, who  
time and industry will enable them to do more  
justice to so obscure and intricate a subject.

Having proceeded thus far, we will commence  
in taking a view of the relative changes, which  
the stomach undergoes in performing its office in  
a state of health, and afterwards endeavour to  
show, how the causes above enumerated may act

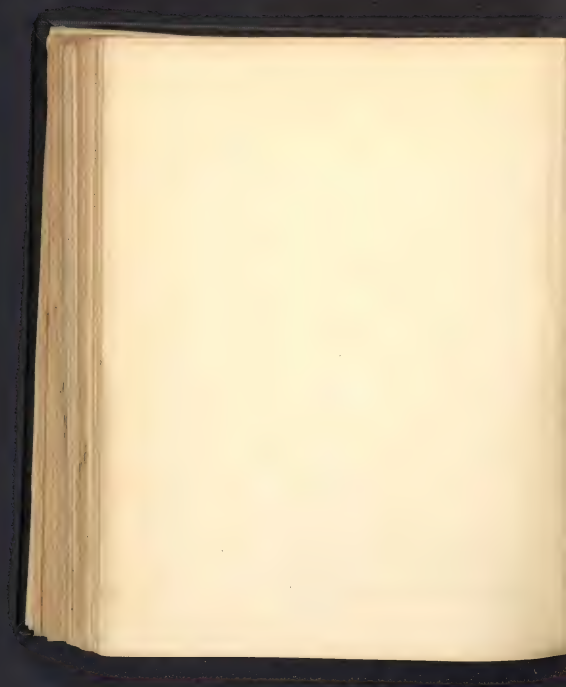




in producing Cholera Morbus

in this purpose

we commence by observing the changes, which the food undergoes from its first entering that organ, until the excretion of its feculent part from the body, which may be said to be of three kinds. - namely, Coction, Chylification, and, what may be termed, Feculent Separation. The first part of the process of digestion is performed in the stomach by means of the gastric juice, and the second or chylification in the duodenum and small intestines, the biliary and pancreatic fluids, mixing in proportional quantities with the chyme, immediately after its issuing from the stomach, contribute, in modes hitherto but imperfectly understood, to the coction and recombination, in new proportions, of its principles, the coloring and other dissolved elements of the bile and pancreatic fluid, serving to elaborate and carry forward the feculent part to the



large intestine, where the entire process of digestion is completed.

These several vessels are raised up by one, and some actions, as we have already mentioned, are conducted upwards in a successive manner, of various success in subsiding in them, which have been denominated sympathies, and it is by the action of the sympathies raised, that the vessels of the fluid vessels and the arteries their branches are relaxed. The food, when taken into the mouth, excites these, by its stimulus, the action of the intestines, glands, and it is, by the same, proper and direct impulse, that the stomach, intestines the fibres of the stomach, are affected. But, as the Liver and Spleen are out of the reach of direct excitement, they must be stimulated into action by an indirect impulse, communicated to them by the stomach. In this case, the latter organ, in all probability, receives from the



digesting or dissolved food, that kind of stimulation  
intended, for and, to sum up, communicated to  
three other organs, subservient to chylification, by  
which, the bile or chyliferous may be, provided at  
the proper time, and in the necessary quantity,  
to mix with the chyme, as it ascends into the  
duodenum, where the whole thus mixed is destined  
in its turn to excite three peculiar actions in  
the course of the intestinal canal, which are neces-  
sary to complete the entire process of chylification  
and feculent separation and excretion.

Hence  
it must be evident, that one of the causes above  
enumerated, as Cold Food, Irregularities in  
Eating and Drinking, Marsh Effluvia &c by  
creating an unnatural irritation in the stomach  
and alimentary canal, which ~~irritation~~ will, se-  
condarily, be communicated to the hepatic, pros-  
tatic, producing there an undue excitement & thus



for the effect which constitutes the disease called  
Cholera Morbus. With these remarks I  
conclude, all that I have to say on the subject of  
the disease of Cholera Morbus and proceed in  
the next place to give some account of the epidemic  
Cholera, altissima &c.

This disease is, for the most part,  
characterized by some looseness of the Abdomen, with  
more or less pain and distention, succeeded by nausea  
and frequent evacuations of bilious matter, brown  
and acrid. It is also, generally attended with  
some heat of the surface, insatiable thirst, increased  
respiration, a frequent, but weak and intermitting  
pulse, when the disease is not violent than some-  
times, after continuing for some or a longer pe-  
riod, prostration ensues, the colour is  
weak and dissipated. But, when the  
disease proceeds to the more violent, the pulse,  
which from the beginning was weak and intermitting,



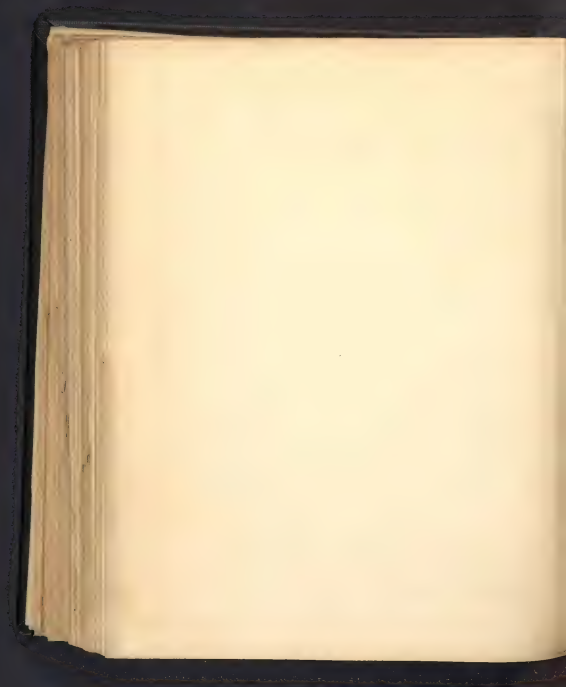


becomes still more so, attended with great tenderness  
of stomach, cold, profuse sweat, frequent and shortly  
continued, great anxiety, & in extremities, a short  
and hurried expiration. The tenderness thro'out  
the muscles of the abdomen and extremities become  
affected with cramps and other, irregular affections  
accompanied by sickness, & in some, great cardiac  
distress, sinking pulse, &c. The great vessels  
erect, terminated in the death of the patient,  
an event, which are unaccountable as far as within  
the force of fluids have been ascertained,  
even, in a much shorter time.

There are the symptoms,  
which generally indicate the nature of the disease  
and its progress. But, as in every other disease, the  
symptoms vary, there is a great deal of variation in the  
course of the disease, and in the manner of its  
termination. It is in some cases, attended with  
a particular situation of the system, and in some



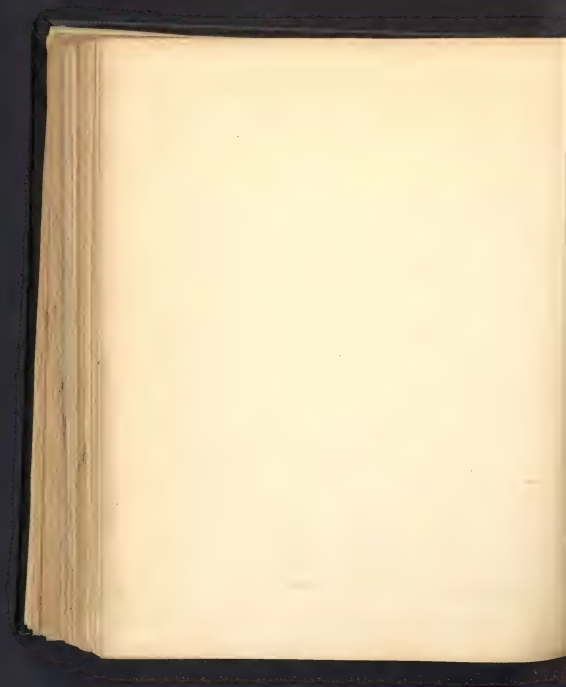
except a relief of the abdomen, unaccompanied by  
any corresponding pain. I retired to bed, as well as  
usual and enjoyed an undisturbed repose until  
the 6th of the next morning, when I awoke with  
a distention of the stomach, with the symptoms  
just mentioned. There and in the course of an hour  
I had a number of profuse evacuations from the  
bowels, which were succeeded by vomiting. Bilious  
colic, in a short time, was seized with cramps  
in my left leg, knee and hand, and soon became  
so completely unsteady, as to be quite unable to  
get from the bed and the face was recharged  
voluntarily. I was, indeed, in the attack,  
that in the space of two hours and a half. That  
evening all hopes of recovery, which opinion I  
believe was not entertained by those who were in  
attendance. Other accidents we also to be met  
with in this disease and much longer it is  
unnecessary to detail.



Quins now described the Causes and Symp-  
toms of Cholera. Next, we will in the next show  
several other measures, which are proper to be em-  
ployed in its cure.

The Treatment of this complaint is to be di-  
vided into that, which is necessary during an attack  
and that which will most effectually prevent a  
recurrence.

The first indication consists in the complete  
removal of the obstructions, situated in the channel;  
a point which we want to then maintain which  
will preserve the continuity of the contract of the  
channels; these are evoked and the one, which we  
want the best calculated to perform, is, Perme-  
abilization the one of 24, and the other, we have to be promoted  
or diluted winds. By the same, the stomach is  
relieved and the system before dejected, now recovers  
since we have a more manageable form of the disease  
presented to us. Permeabilization and dilution



[illegible]

With the exception, in case of a small number  
occasionally, of an occasional small number of  
the 'contaminated', or the 'signatures' which  
are always 'signatures' and are always 'signatures' of  
the 'signatures' which are always 'signatures' of  
the 'signatures' which are always 'signatures' of  
the 'signatures' which are always 'signatures' of





all kinds of flannels & blankets and apply them, over  
the stomach as well as over the arms; the chest, or an-  
other chest has also been found according to reports.

Should the measures fail in arresting the progress  
of the disease, send him to the committee and, either  
the same or a large blister over the epigastric region  
must next be resorted to. I believe the latter is  
less dangerous, as it is near at hand, and in the interim,  
should quinine and the other measures, above recom-  
mended have failed, nothing I am sure, will be  
found so successful, as the Urom. Sali.  
which, as I believe, will prove true, as what  
it will do, the other will.

Of the remedy,  
I read, with the more confidence, as having ex-  
perienced its beneficial effects, when I was sick  
that winter, and came to an extent, almost  
losing the power of life to bear, and when, even  
in its itself, had almost left me.



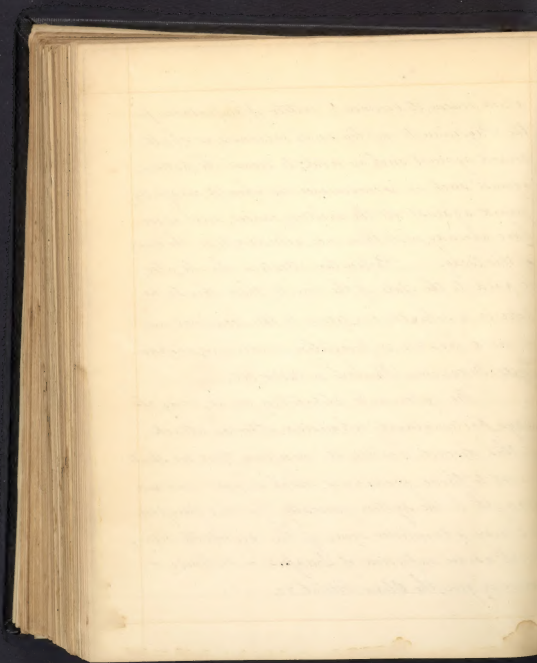
we feel strongly, however, from the limited experience  
that we give a combination of C. Small & Thompson  
from Cambridge, in the following propositions, each  
of the several C. Small & Thompson, formed into a pile,  
to serve as one marriage, and then any time a  
combination to be constructed. The operation of this  
combination is, a slight variation relative, and  
and, in reality, the outcome of a union, to produce  
an attractive effect in the system, likewise, if required  
to produce the distinctive effect, it may be found  
to be a valuable measure, & it is not until  
when the transition has ceased.

assuming  
the combined we have mentioned have succeeded in  
uniting the people, & are altered the new individ-  
ual, it is not even better, and it is, however, a re-  
sult. It is in no means uncommon to have  
a recurrence of C. Small & Thompson, but, even after we  
have once succeeded in uniting an altered, for



which reason, it becomes a matter of importance for the Physician, to employ such measures, as shall guard against such an event; to secure the patient, against such an inconvenience, we should, carefully, guard against all the existing causes, such as we have already, more than once, alluded to, in the course of this Essay. Particular attention should, also, be paid to the state of the bowels, these should be kept in a soluble condition by the occasional use of mild laxative or purgative medicines, as opium, salts, Magnesia, Rhubarb or Castor oil.

The system and alimentary canal, being always preternaturally exhausted, after an attack of this disease, renders it necessary, that we should resort to those medicines, which impart tone and strength to the system generally, for this purpose, we may administer some of the vegetable bitters, such, as an infusion of Quassia or Colombo, or we may give, the Elixir Bitriol &c.



Should the predisposition to a recurrence still exist, it is quite probable, that it is kept up by some derangement of the Liver itself, in which case, nothing will be found so effectual, as a course of Mercury, urged to salivation.

The clothing of persons of this description is a matter of no small importance and should by no means be overlooked in the prophylactic treatment of this disease. The wearing of flannel next to the skin has been found an excellent preventive in all the bowel affections, and not less so, in Cholera Morbus.

